AMENDMENTS TO THE CLAIMS:

Claims 1-20 (cancelled)

21. (New) A connecting material for connecting a certain object to another object, comprising:

solder material; and

dispersed particulate hydrogen storage metal material able to occlude hydrogen,

wherein said particulate hydrogen storage metal material is storing hydrogen.

22. (New) The connecting material according to claim 21, wherein

said hydrogen storage metal material is capable of changing in volume in response to a temperature and/or a hydrogen pressure of an atmosphere in which said hydrogen storage metal material is located.

23. (New) The connecting material according to claim 21, wherein

said hydrogen storage metal material is selected from the group consisting of $LaNi_5$, $LaNi_{4.5}Al_{0.5}$, $Ti_{0.88}Zr_{0.12}Mn_{1.0}V_{0.4}Ni_{0.6}$, $LaNi_{4.5}Mn_{0.5}$, Mg_2Ni, Pd, V, Ti and Zr.

24. (New) The connecting material according to claim 21, wherein

said hydrogen storage metal material is capable of being in a state in which no hydrogen is stored by said hydrogen storage metal material.

25. (New) The connecting material according to claim 21, wherein

said solder material comprises a cream solder, and

said particulate hydrogen storage metal material is dispersed throughout said cream solder.

26. (New) A method of connecting a certain object to another object, comprising:

heating a connecting material located between a certain object and another object, wherein said connecting material includes

(i) solder material, and

(ii) dispersed particulate hydrogen storage metal material able to occlude hydrogen, such that said solder material melts; and

cooling said connecting material such that said solder material solidifies, whereby a connection portion is formed which interconnects said certain object and said another object.

27. (New) The method according to claim 26, wherein

said hydrogen storage metal material is capable of changing in volume in response to a temperature and/or a hydrogen pressure of an atmosphere in which said hydrogen storage metal material is located.

28. (New) The method according to claim 27, wherein

said certain object comprises an electronic component, and

said another object comprises a circuit board.

29. (New) The method according to claim 26, wherein

said hydrogen storage metal material is selected from the group consisting of $LaNi_5$, $LaNi_{4.5}Al_{0.5}$, $Ti_{0.88}Zr_{0.12}Mn_{1.0}V_{0.4}Ni_{0.6}$, $LaNi_{4.5}Mn_{0.5}$, Mg_2Ni, Pd, V, Ti and Zr.

30. (New) The method according to claim 29, wherein

said certain object comprises an electronic component, and

said another object comprises a circuit board.

31. (New) The method according to claim 26, wherein

said hydrogen storage metal material is capable of being in a state in which no hydrogen is stored by said hydrogen storage metal material.

32. (New) The method according to claim 31, wherein

said certain object comprises an electronic component, and

said another object comprises a circuit board.

33. (New) The method according to claim 26, wherein
said solder material comprises a cream solder, and
said particulate hydrogen storage metal material is dispersed throughout said cream solder.

34. (New) The method according to claim 33, wherein
said certain object comprises an electronic component, and
said another object comprises a circuit board.

35. (New) The method according to claim 26, wherein
said certain object comprises an electronic component, and
said another object comprises a circuit board.

36. (New) A method of producing an electronic circuit board, comprising:

heating a first connecting material located between a first electronic component and a circuit board, with said first connecting material including

(i) solder material, and

(ii) dispersed particulate first hydrogen storage metal material able to occlude hydrogen,

such that said solder material melts;

cooling said first connecting material such that said solder material solidifies, whereby a first connection portion is formed which interconnects said first electronic component and said circuit board;

heating a second connecting material located between a second electronic component and said circuit board, with said second connecting material including

(i) solder material, and

(ii) dispersed particulate second hydrogen storage metal material able to occlude hydrogen,

such that said solder material melts; and

cooling said second connecting material such that said solder material solidifies, whereby a second connection portion is formed which interconnects said second electronic component and said circuit board,

wherein said first hydrogen storage metal material is different than said second hydrogen storage metal material.

37. (New) The method according to claim 36, wherein

each of said first and second hydrogen storage metal material is capable of changing in volume in response to a temperature and/or a hydrogen pressure of an atmosphere in which said each of said first and second hydrogen storage metal material is located.

38. (New) The method according to claim 37, wherein

said first electronic component is to be recovered separately from said second electronic component upon detaching said first and second electronic components from said circuit board.

39. (New) The method according to claim 36, wherein

each of said first and second hydrogen storage metal material is selected from the group consisting of $LaNi_5$, $LaNi_{4.5}Al_{0.5}$, $Ti_{0.88}Zr_{0.12}Mn_{1.0}V_{0.4}Ni_{0.6}$, $LaNi_{4.5}Mn_{0.5}$, Mg_2Ni, Pd, V, Ti and Zr.

40. (New) The method according to claim 39, wherein

said first electronic component is to be recovered separately from said second electronic component upon detaching said first and second electronic components from said circuit board.

41. (New) The method according to claim 36, wherein

each of said first and second hydrogen storage metal material is capable of being in a state in which no hydrogen is stored by a respective said each of said first and second hydrogen storage metal material.

42. (New) The method according to claim 41, wherein

said first electronic component is to be recovered separately from said second electronic component upon detaching said first and second electronic components from said circuit board.

43. (New) The method according to claim 36, wherein

said solder material comprises a cream solder,

said first connecting material comprises said particulate first hydrogen storage metal material dispersed throughout said cream solder, and

said second connecting material comprises said particulate second hydrogen storage metal material dispersed throughout said cream solder.

44. (New) The method according to claim 43, wherein

said first electronic component is to be recovered separately from said second electronic component upon detaching said first and second electronic components from said circuit board.

45. (New) The method according to claim 36, wherein

said first electronic component is to be recovered separately from said second electronic component upon detaching said first and second electronic components from said circuit board.

46. (New) A method of detaching a certain object from another object, comprising:

subjecting to an atmosphere having a hydrogen occlusion condition, a connecting material interconnecting a certain object and another object, with said connecting material including

(i) solder material, and

(ii) dispersed particulate hydrogen storage metal material, storing substantially no hydrogen, and able to occlude hydrogen,

such that said particulate hydrogen storage metal material occludes hydrogen, thereby increasing a volume of said particulate hydrogen storage metal material.

47. (New) The method according to claim 46, wherein

said hydrogen occlusion condition comprises a temperature and/or a hydrogen pressure of said atmosphere.

48. (New) The method according to claim 47, wherein

increasing a volume of said particulate hydrogen storage metal material results in said connecting material being weakened in the vicinity of said particulate hydrogen storage metal material.

49. (New) The method according to claim 48, further comprising:

applying an external force to the weakened connecting material.

50. (New) The method according to claim 47, wherein

said certain object comprises an electronic component, and

said another object comprises a circuit board.

51. (New) The method according to claim 47, wherein

said atmosphere has a hydrogen pressure within a range of from 0.01 Mpa to 10 Mpa.

52. (New) The method according to claim 47, wherein

said atmosphere has a temperature within a range of from room temperature to 150°C.

53. (New) The method according to claim 46, wherein

said hydrogen storage metal material is selected from the group consisting of $LaNi_5$, $LaNi_{4.5}Al_{0.5}$, $Ti_{0.88}Zr_{0.12}Mn_{1.0}V_{0.4}Ni_{0.6}$, $LaNi_{4.5}Mn_{0.5}$, Mg_2Ni, Pd, V, Ti and Zr.

54. (New) The method according to claim 53, wherein

increasing a volume of said particulate hydrogen storage metal material results in said connecting material being weakened in the vicinity of said particulate hydrogen storage metal material.

55. (New) The method according to claim 54, further comprising:

applying an external force to the weakened connecting material.

56. (New) The method according to claim 53, wherein

said certain object comprises an electronic component, and

said another object comprises a circuit board.

57. (New) The method according to claim 53, wherein

said atmosphere has a hydrogen pressure within a range of from 0.01 Mpa to 10 Mpa.

58. (New) The method according to claim 53, wherein

said atmosphere has a temperature within a range of from room temperature to 150°C.

59. (New) The method according to claim 46, wherein

said hydrogen storage metal material is capable of being in a state in which no hydrogen is stored by said hydrogen storage metal material.

60. (New) The method according to claim 59, wherein

increasing a volume of said particulate hydrogen storage metal material results in said connecting material being weakened in the vicinity of said particulate hydrogen storage metal material.

61. (New) The method according to claim 60, further comprising:

applying an external force to the weakened connecting material.

62. (New) The method according to claim 59, wherein
said certain object comprises an electronic component, and
said another object comprises a circuit board.

63. (New) The method according to claim 59, wherein
said atmosphere has a hydrogen pressure within a range of from 0.01 Mpa to 10 Mpa.

64. (New) The method according to claim 59, wherein
said atmosphere has a temperature within a range of from room temperature to 150°C.

65. (New) The method according to claim 46, wherein
said solder material comprises a cream solder, and
said particulate hydrogen storage metal material is dispersed throughout said cream solder.

66. (New) The method according to claim 65, wherein
increasing a volume of said particulate hydrogen storage metal material results in said connecting material being weakened in the vicinity of said particulate hydrogen storage metal material.

67. (New) The method according to claim 66, further comprising:
applying an external force to the weakened connecting material.

68. (New) The method according to claim 65, wherein
said certain object comprises an electronic component, and
said another object comprises a circuit board.

69. (New) The method according to claim 65, wherein
said atmosphere has a hydrogen pressure within a range of from 0.01 Mpa to 10 Mpa.

70. (New) The method according to claim 65, wherein

said atmosphere has a temperature within a range of from room temperature to 150°C.

71. (New) The method according to claim 46, wherein

increasing a volume of said particulate hydrogen storage metal material results in said connecting material being weakened in the vicinity of said particulate hydrogen storage metal material.

72. (New) The method according to claim 71, further comprising:

applying an external force to the weakened connecting material.

73. (New) The method according to claim 46, wherein

said certain object comprises an electronic component, and

said another object comprises a circuit board.

74. (New) The method according to claim 46, wherein

said atmosphere has a hydrogen pressure within a range of from 0.01 Mpa to 10 Mpa.

75. (New) The method according to claim 46, wherein

said atmosphere has a temperature within a range of from room temperature to 150°C.

76. (New) A method of detaching two objects from another object, comprising:

subjecting to a first atmosphere having a first hydrogen occlusion condition,

(i) a first connecting material interconnecting a first object and another object, with said first connecting material including

(a) solder material, and

(b) dispersed particulate first hydrogen storage metal material able to occlude hydrogen when subjected to said first atmosphere,

such that said particulate first hydrogen storage metal material occludes hydrogen, thereby increasing a volume of said particulate first hydrogen storage metal material, and

(ii) a second connecting material interconnecting a second object and said another object, with said second connecting material including

(a) solder material, and

(b) dispersed particulate second hydrogen storage metal material, said second hydrogen storage metal material being different than said first hydrogen storage metal material such that said second hydrogen storage metal material is not able to substantially occlude hydrogen when subjected to said first atmosphere and is able to occlude hydrogen when subjected to a second atmosphere having a different second hydrogen occlusion condition,

such that said particulate second hydrogen storage metal material does not substantially occlude hydrogen, thereby not substantially increasing a volume of said particulate second hydrogen storage metal material; and

subjecting said second connecting material to said second atmosphere such that said particulate second hydrogen storage metal material occludes hydrogen, thereby increasing a volume of said particulate second hydrogen storage metal material.

77. (New) The method according to claim 76, wherein

said first hydrogen occlusion condition comprises a temperature and/or a hydrogen pressure of said first atmosphere, and

said different second hydrogen occlusion condition comprises a temperature and/or a hydrogen pressure of said second atmosphere.

78. (New) The method according to claim 76, wherein

each of said first and second hydrogen storage metal material is selected from the group consisting of $LaNi_5$, $LaNi_{4.5}Al_{0.5}$, $Ti_{0.88}Zr_{0.12}Mn_{1.0}V_{0.4}Ni_{0.6}$, $LaNi_{4.5}Mn_{0.5}$, Mg_2Ni, Pd, V, Ti and Zr.

79. (New) The method according to claim 76, wherein

each of said first and second hydrogen storage metal material is capable of being in a state in which no hydrogen is stored by a respective said each of said first and second hydrogen storage metal material.

80. (New) The method according to claim 76, wherein

said solder material comprises a cream solder,

said first connecting material comprises said particulate first hydrogen storage metal material dispersed throughout said cream solder, and

said second connecting material comprises said particulate second hydrogen storage metal material dispersed throughout said cream solder.

81. (New) A method of detaching a certain object from another object, comprising:

weakening a connecting material interconnecting a certain object and another object, with said connecting material including solder material and dispersed particulate hydrogen storage metal material able to occlude hydrogen, by

(i) subjecting said connecting material to a first atmosphere having a hydrogen occlusion condition such that said particulate hydrogen storage metal material occludes hydrogen, thereby increasing a volume of said particulate hydrogen storage metal material, and then

(ii) subjecting said connecting material to a second atmosphere having a hydrogen release condition such that said particulate hydrogen storage metal material releases hydrogen, thereby decreasing a volume of said particulate hydrogen storage metal material.

82. (New) The method according to claim 81, wherein

said hydrogen occlusion condition comprises a temperature and/or a hydrogen pressure of said first atmosphere.

83. (New) The method according to claim 82, further comprising:

repeatedly subjecting said connecting material to said first atmosphere having said hydrogen occlusion condition and then to said second atmosphere having said hydrogen release condition until said connecting portion is sufficiently weakened.

84. (New) The method according to claim 82, further comprising:

applying an external force to the weakened connecting material.

85. (New) The method according to claim 81, wherein

said hydrogen storage metal material is selected from the group consisting of $LaNi_5$, $LaNi_{4.5}Al_{0.5}$, $Ti_{0.88}Zr_{0.12}Mn_{1.0}V_{0.4}Ni_{0.6}$, $LaNi_{4.5}Mn_{0.5}$, Mg_2Ni, Pd, V, Ti and Zr.

86. (New) The method according to claim 85, further comprising:

repeatedly subjecting said connecting material to said first atmosphere having said hydrogen occlusion condition and then to said second atmosphere having said hydrogen release condition until said connecting portion is sufficiently weakened.

87. (New) The method according to claim 85, further comprising:

applying an external force to the weakened connecting material.

88. (New) The method according to claim 81, wherein

said hydrogen storage metal material is capable of being in a state in which no hydrogen is stored by said hydrogen storage metal material.

89. (New) The method according to claim 88, further comprising:

repeatedly subjecting said connecting material to said first atmosphere having said hydrogen occlusion condition and then to said second atmosphere having said hydrogen release condition until said connecting portion is sufficiently weakened.

90. (New) The method according to claim 88, further comprising:
applying an external force to the weakened connecting material.

91. (New) The method according to claim 81, wherein
said solder material comprises a cream solder, and
said particulate hydrogen storage metal material is dispersed throughout said cream solder.

92. (New) The method according to claim 91, further comprising:

repeatedly subjecting said connecting material to said first atmosphere having said hydrogen occlusion condition and then to said second atmosphere having said hydrogen release condition until said connecting portion is sufficiently weakened.

93. (New) The method according to claim 91, further comprising:
applying an external force to the weakened connecting material.

94. (New) The method according to claim 81, further comprising:

repeatedly subjecting said connecting material to said first atmosphere having said hydrogen occlusion condition and then to said second atmosphere having said hydrogen release condition until said connecting portion is sufficiently weakened.

95. (New) The method according to claim 81, further comprising:
applying an external force to the weakened connecting material.

96. (New) A method of producing an electronic circuit board, comprising:

heating a connecting material located between an electronic component and a circuit board, wherein said connecting material includes

(i) solder material, and

(ii) dispersed particulate hydrogen storage metal material able to occlude hydrogen, such that said solder material melts; and

cooling said connecting material such that said solder material solidifies, whereby a connection portion is formed which interconnects said electronic component to said circuit board.

97. (New) The method according to claim 96, wherein

said hydrogen storage metal material is capable of changing in volume in response to a temperature and/or a hydrogen pressure of an atmosphere in which said hydrogen storage metal material is located.

98. (New) The method according to claim 96, wherein

said hydrogen storage metal material is selected from the group consisting of $LaNi_5$, $LaNi_{4.5}Al_{0.5}$, $Ti_{0.88}Zr_{0.12}Mn_{1.0}V_{0.4}Ni_{0.6}$, $LaNi_{4.5}Mn_{0.5}$, Mg_2Ni, Pd, V, Ti and Zr.

99. (New) The method according to claim 96, wherein

said hydrogen storage metal material is capable of being in a state in which no hydrogen is stored by said hydrogen storage metal material.

100. (New) The method according to claim 96, wherein

said solder material comprises a cream solder, and

said particulate hydrogen storage metal material is dispersed throughout said cream solder.